

We claim:

1. A motor stator comprised of a lamination body in which conductive
5 layers and insulating layers are laminated alternately, characterized in that a
plurality of sets of coils of wound conductive patterns are formed on each
conductive layer and said coils of conductive layers adjoined via said insulating
layers are connected to each other via through holes formed on said insulating
layers.

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2. The stator according to claim 1 characterized in that a drive circuit of
said coil is provided in at least one of said conductive layers.

3. The stator according to claim 1 or 2 characterized in that said
15 conductive layer is formed on an insulating substrate as said insulating layer.

4. The stator according to any one of claims 1 to 3 characterized in that
each winding of the coils of the conductive layers adjoining each other via said
insulating layers are connected to each other via said through holes.

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5. The stator according to claim 1 characterized in that said conductive
pattern is formed in a planar direction of the conductive layer.

6. A motor stator comprised of a lamination body in which conductive
25 layers and insulating layers are laminated alternately, characterized in that a
plurality of sets of coils of wound conductive patterns are formed on the
conductive layer, said coils linked via said insulating layers are connected to each

other via the through holes formed on said insulating layers, and said coils are formed in a layered direction of a plurality of conductive layers.

7. A motor comprising the stator according to any one of claims 1 to 5
5 and a rotor comprising a permanent magnet.

8. A coil structure in which a plurality of conductive layers and insulating layers are laminated alternately, coils with wound conductive patterns are formed on each conductive layer, the coils of the conductive layers adjoined
10 via said insulating layers are electrically connected with one another via the through holes formed in said insulating layers, the coil structure being characterized in that said through hole is formed for each wind of said conductive pattern of said coil, which, via said through hole, is electrically connected with each wind of the conductive pattern of the coil of the conductive layers adjoined
15 via said insulating layers.

9. The coil structure according to claim 8 characterized in that said conductive pattern is formed in a planar direction of said conductive layer.

20 10. A coil structure comprised of a lamination body in which conductive layers and insulating layers are laminated alternately, characterized in that a plurality of sets of coils of wound conductive patterns are formed on the conductive layer, said coils linked via said insulating layers are connected to each other via the through holes formed on said insulating layers, and said coils are
25 formed in a layered direction of a plurality of conductive layers.

11. (Addition) The motor according to claim 7, characterized in that said stator is made of an inner stator and an outer stator which are respectively formed in a ring shape, and a rotor formed in a ring shape is provided between said stators which rotates integrally with a rotatably supported axis.

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12. (Addition) The motor according to claim 11 characterized in that said coil pattern is formed along a layered direction of said plurality of conductive layers.

10 13. (Addition) The motor according to claim 12 characterized in that said coil pattern is formed in a spiral shape along a layered direction of said conductive layers.

15 14. (Addition) The motor according to claim 13 characterized in that said spiral-shaped coil pattern is formed over a plurality of layers along a radial direction of the stator.